

A note on the occurrence of *Bolbosoma capitatum* (Linstow, 1880)
(Acanthocephala) from a false killer whale stranded on the coast of
Western Australia

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About 50 specimens of an acanthocephalan, *Bolbosoma capitatum* (Linstow), were found firmly embedded in a section of the gut wall of one of the false killer whales, *Pseudorca crassidens* Owen, stranded in late July, 1986 at Augusta, Western Australia. The section of gut to which the parasites were attached was sent for examination from the Veterinary Clinic of the Department of Agriculture, Western Australia. The infestation must have been a heavy one. Linstow (1880:49) cited *Pseudorca crassidens* as the type host of the acanthocephalan. It is most likely that a crustacean is the first intermediate host of the parasite and a fish the second.

The specimens are long and wormlike. Length of trunk, female 20-90 mm, male 30-35; maximum width 2-3 mm. An anterior 'fastening complex' is set on a long neck and consists of (1) most anteriorly an introvert, (2) a median truncated, conical structure and (3) posteriorly a larger globular to subglobular, heavily armed region. The introvert is 0.5-0.6 mm long, 0.2-0.45 wide, armed with 15-17 rows of 6-8 hooks/row. The conical section consists of an anterior spined part about 0.5-0.6 mm long and an unarmed part about 0.4-0.5 mm long. The globular structure is 1.1-2.0 mm long and 2.6-3.1 mm wide and is heavily armed with strong spines. The whole 'complex' constitutes a very effective adhesive organ. When it penetrates below the submucosal layers of the gut it expands to become a swollen bulb with sharp, backwardly directed spines. Embryonated eggs are 0.130-0.140 mm long, 0.030-0.038 wide and possess polar prolongations of the middle membrane. The specimens differ from *Bolbosoma hamiltoni* Baylis, 1929 from the fin whale, *Balaenoptera physalus*, in the number of rows of introvert hooks.

The only other report of *B. capitatum* from Australia is that of Edmonds (1957) who reported it from some specimens of *Globiocephala melaena* Traill stranded at Prime Beach, St Vincent Gulf, South Australia in 1944. In a more recent publication Ling & Aitken (1981) considered these whales to have been *P. crassidens* and not *G. melaena*. Specimens of the parasite have been deposited in the Western Australian Museum (WAM 405-86) and the Australian Helminthological Collection (AHC 16307), South Australian Museum, Adelaide.

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